imparted on a device, and non-visual communication to a user of these forces or the various limitations as recited in the dependent claims.

CONCLUSION

Applicants submit that all claims are allowable as written and respectfully request early favorable action by the Examiner.

If for any reason a fee is required, a fee paid is inadequate or credit is owed for any excess fee paid, you are hereby authorized and requested to charge Deposit Account No. **04-1105**.

Respectfully submitted,

Date: Oct. 15, 2002

By: ______________________

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Marked-Up Version of Section of Specification Showing Changes Made

On page 10, lines 2-4:

Referring now to the various figures of the drawing, wherein like references or characters refer to like parts, there is shown in FIGS. 1-[1] 14 various views and embodiments in accordance with the present invention.

On page 12, lines 23-31:

Signal produced from the sensor element 310 may then be filtered, conditioned, and amplified by, for example, an isolation amplifier and then used to drive any one of several output devices. For example, as shown in FIG. 1, the signal produced from the sensor element 310 passes to processing and isolation electronics 106 to the output device 100, which may be an electromechanical transducer 102 attached to the handle of the surgical device or attached to the medical practitioner, a speaker or headphone 104 or a combination of these output devices.

In one embodiment, an output device 100 is an electromechanical transducer in the form of a small speaker glued inversely to the handle such that output in the speaker

On page 14, line 1, before "In a particularly preferred embodiment,":

FIGS. 8 and 9 show detailed views of one exemplary embodiment of the surgical device in accordance with the invention. One or more wires 810 may extend through the length of the shaft 804/904 and to the proximal end of the device where they are wired to a connector 812. Strain gages, shown in detail in FIG. 9 may be mounted on the shaft 804/904, preferably on each side of the shaft 804/904, as shown. In a preferred embodiment, four total full-bridge configuration strain gages are mounted on each side of the shaft 804/904 and then soldered onto

solder tabs. In one embodiment, the surgical pick 638 is tear shaped, as shown in FIG. 8, and is approximately 0.035 inch at its thickest point. The surgical pick 638 preferably extends at an angle θ from the distal end 808 of the shaft 804/904. On one embodiment, the surgical pick 938 is approximately 0.3 inch in length. In the embodiment shown in FIG. 8, the shaft 804/904 tapers towards its distal end 808. For example, in one embodiment, the shaft 804/904 may have a thickness of approximately 0.055 inch at its thickest portion and a thickness of approximately 0.025 inch at its narrowest portion. In some embodiments the length of the shaft 804/904 from its proximal end to the point at which it begins to taper is at least 10 times as long as the length of the remaindering tapered portion. In one embodiment, for example, the length of the thickest portion of the shaft 804/904 is approximately 4.46 inch and length of the tapered portion of the shaft is approximately 0.313 inch. In the embodiment shown in FIG. 8, the wires 810 run through the length of the shaft 904/904, through the strain gages, and to the connector 812. In one embodiment, the strain gages are nearly four inches away from the connector 810, preferably 3.9 inch. A handle 802/902 is mounted to preferably cover the strain gages and all electrical connections. In an exemplary embodiment, the handle 802/902 has an overall length of approximately five inches. The handle 802/902 is hollow and preferably had a wall thickness of approximately 0.1 inch. For example, in one embodiment, the handle has an inner diameter of approximately 0.4 inch and an outer diameter of approximately 0.5 inch. The handle 802/902 is shown to taper towards its distal end. In one exemplary embodiment, the length of the handle 802/902 from its proximal end to the point where the handle begins to taper is approximately 4.645 inch and the tapered portion tapers to an inner diameter of approximately 0.2 inch and an outer diameter of approximately 0.3 inch. Of course, these dimensions may vary and depend on the type of device used and the application of the device in use. For example, when the device is used in larger surgical areas, the device may be larger. On the other hand, when the device is used in smaller surgical areas, for example, during arthroscopic procedures, the device may be smaller. Further, the dimensions of the handle, shaft, surgical pick and other portions of the

device vary relative to each other. For example, the handle 802/902 is mounted to preferably cover the strain gages and all electrical connections. Thus, the handle 802/902 is sized accordingly.

On page 14, lines 1-11:

In a particularly preferred embodiment, the surgical device, as shown in FIG. 10, is self contained and battery operated. Preferably, the handle is hollow and contains signal conditioning electronics 108, one or more batteries 110 and an electromechanical transducer 102.

An additional preferred embodiment includes a surgical device comprised of modular elements, some of which may be disposable and/or reusable. For example, a disposable instrument tip 112 containing the sensor 310 or a disposable insert as shown in FIG. 11 may be used. Such disposable instruments may be used in conjunction with a reusable instrument having an electrical cable connecting the surgical instrument to an external box containing the processing electronics.

On page 16, lines 7-16:

The device may take the output from the electronic controller or amplifier box and directly drive a speaker 100/104. This works fine for a dynamic signal, however for static forces, no "sound" would be generated when the sensor is flexed and then held. Thus, for measurement of static forces, preferably the electronic controller mixes the output from the amplifier with the output from the amplifier after it is run through a frequency to voltage converter. See FIG. 13. The FVC will take the DC portion of the output signal and convert it into a tone. The pitch will vary as the sensor is pressed harder, thus resulting in frequency as an indicator the applied force. Thus, mixing signal with the dynamic output, the medical practitioner will be able to perceive both static and dynamic forces.